

## Reviews and Bibliographical Notices.

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**Lectures on diseases of the nervous system, especially in women.** By S. WEIR MITCHELL, M.D. With five plates. Philadelphia: Henry C. Lea's Son & Co., 1881.

Dr. Weir Mitchell has published in this little volume, under the form of a series of clinical lectures, a number of interesting papers upon some of the nervous maladies that especially, but not exclusively, affect the female sex, which have not received general detailed attention from medical writers. Several of the lectures cover observations that are altogether or in large part new in medical literature; others are clinical studies of fairly well-known disorders, but which are here presented in the light of numerous original and interesting observations. Dr. Mitchell's large clinical experience with this class of diseases, and his well-known ability as an acute and critical observer, give to his statements a force and apparent value that would be wanting in a work by a less distinguished author. There can be no doubt as to his eminent fitness to produce such a work, the only question is, does the volume fully bear out the author's well-deserved reputation? We must admit a slight amount of disappointment at first in the examination of the work, which, however, seems hardly justified in a closer perusal. It is simply a collection of clinical essays on certain manifestations or phases of nervous disease, and not an elaborate and consecutive treatise; and so far as it has aimed it has fairly hit the mark. The subjects treated are of interest, and are handled by one who has had opportunities for observation such as very few are favored with; and while the cases reported are not so remarkable as occur in the practice of so prominent a specialist in nervous disorders, they are such as only rarely come within the experience of the general practitioner. Yet they are liable to be met with at any time, and the perusal of a work like this will do much to prepare him for their recognition.

The subjects discussed are, in the order in which they occur in the book : The Paralysis of Hysteria, Hysterical Motor Ataxia, Hysterical Paresis, Mimicry of Disease, Unusual Forms of Spasmodic Affections in Women, Tremor, Chronic Spasms, Chorea of Childhood, Habit Chorea, Disorders of Sleep in Nervous or Hysterical Persons, Vaso-motor and Respiratory Disorders in the Nervous or Hysterical, Hysterical Aphonia, Gastro-Intestinal Disorders of Hysteria, and the Treatment of Obstinate Cases of Nervous Exhaustion and Hysteria by Seclusion, Rest, Massage, Electricity, and Full Feeding. The majority of these chapters are simply clinical lectures upon rare or peculiar phases of nervous disease of the so-called functional varieties. While very interesting and profitable reading, they do not for the most part require detailed notice here. Some of the subjects have been discussed perhaps more exhaustively by other writers, such as the hysterical aphonias and paralyzes, but many of the observations here recorded are absolutely new and of especial value on that account. The chapter on chorea of childhood is an interesting study of the relations of chorea to race, climate, season, etc., and is illustrated by several tables and diagrams which are inserted in a rather unusual place,—the beginning of the volume. Dr. Mitchell finds that the weight of evidence is in favor of the view that chorea is less prevalent in country districts than in large towns, that there is a less liability to it in the negro than in the white race, that the spring is the season of the year in which it is most liable to occur or recur, and that there is an apparent relation between the condition of the weather and the prevalence of the disease. He divides the disorder into three varieties as follows :

*"Group first.*—The common type ; awkwardness and incoördination of voluntary movement, followed soon or late by automatic or unwilling clonic spasms of various parts.

*"Group second.*—The disease never gets beyond the first stage of incoördination. Just as in some sclerosis of the cord there is no tremor save during volitional acts, so here the irregular motions only occur during willed actions.

*"Group third* is, I think, the most unusual type, but I see occasional cases every spring. In this there are constant automatic, irregular clonic spasms usually of the hands, but during volitional acts these entirely vanish, and the most complicated acts are well performed and without obvious incoördination. In other cases voluntary motion merely lessens the spasmodic activity, but does not abolish it."

If this last class or group is to include those cases in which the choreic incoördination is more or less controllable by the will of the patient, we should hardly consider it a rare form. We have seen a number of cases in which complicated voluntary motions were not interfered with to any great extent by the chorea, which was at other times quite marked.

The last chapter is simply a restatement of the author's plan of treatment by rest, and skim-milk, and massage of certain neurasthenic conditions. It appears to us here that some allusion to the recent memoir of Drs. Putnam-Jacobi and White on the combination of the cold pack with the massage in some of these cases might have been appropriate. These authors seem to have demonstrated that there is a decided value to this form of hydro-pathy in the treatment of some of these anæmic and neurasthenic cases.

In conclusion, we will say of the work that it is in very many respects an excellent one, and one that we have found profit in reading. And yet we must still confess a feeling that to have produced it would have been more to the credit of a medical writer with a reputation less exalted than is that of Dr. Mitchell.

**Das hirngewicht des menschen. Eine studie** von Dr. THEODOR L. W. v. BISCHOFF. Bonn, 1880. (*The brain-weight of man.*)

The material upon which Dr. Bischoff has based this volume is the examination of about 900 bodies, with reference to the brain-weight as influenced by sex, age, weight, and size of body. His actual measurements he tabulates in four different orders in the appendix, and thereby places his material at the command of any one who chooses to utilize it. He criticises justly all his predecessors for having omitted such tabulations, as the reader is thereby confined to the author's personal deductions. Bischoff's measurements were taken with a care commanding full confidence. He claims himself that the greatest objection which can be raised against some of his comparisons, is the fact that the bodies examined were dead from all varieties of disease, altering the bodily weight, though evidently influencing but very little the weight of the brain. Moreover, the occurrence of loss of weight by wasting diseases is about balanced in his large statistics by the gain from dropsy in other instances.

The deductions from these statistics, as well as the results of other authors, are discussed in some 170 pages in a very unassuming way, avoiding any display of ingenious theorizing which

the subject does not warrant. The influence of sex is first considered. A table is given, quoting the average weight calculated by different observers for male and female brains. Wide variations are to be found amongst the authors, which must really be expected, unless very large figures can be commanded. The author has found the male brain to vary from 1,018 to 1,925 grams, and the female from 820 to 1,565. His averages are 1,362 for the male, and 1,219 for the female, showing an average difference of 143 grams. His figures agree best with those of other authors of similar experience, like Rob. Boyd. All these statistics refer to Europeans, mostly of the lower classes, to be found in hospitals. All authors admit the difference between the sexes, usually amounting to about 8 to 9 per cent. This difference shows itself also by the fact that the healthy male brain rarely, if ever, weighs less than 1,000, and may amount to 2,000, while a female brain of 830 is no great rarity, and female brains above 1,600 are not met with. This sexual difference cannot be explained alone by differences in weight and stature, since no other factor possesses so marked an influence as the sex.

The weight of the brain does not appear proportionate at all to the bodily weight, when a few instances only are taken at haphazard. It is only when large numbers are considered that the parallelism becomes apparent. By grouping his results in classes, increasing each by 10 kilo. in weight, Bischoff shows that, other influences aside, the heavier the body the heavier also may we expect the brain to be. In the individual instance, however, we cannot predict the brain-weight thereby. His tables show clearly the difference of sex, since in comparing classes of the same weight the male brains have still the advantage.

The relative weight of the brain to that of the body is accordingly a figure within wide limits. As the mean of all observations, Bischoff states it as 1 in about 35. On the whole the proportion increases as the weight diminishes, so that small individuals have a relatively heavier brain.

The influence of the bodily size is, on the whole, parallel to that of the weight. In small series the individual variations may mask this factor completely, but Bischoff's extensive figures show after all that the larger the stature the heavier may we expect the brain, with this provision, that a relatively heavier brain is possessed by smaller individuals. This general statement applies to comparisons amongst various animal species as well.

The relation of age to the brain-weight is illustrated by the

author by very copious statistics, but which do not really teach much. The normal brain, of course, continues to increase in weight until growth is completed, which seems to require about 20 years for the female, but between 20 and 30 years for the male. Amongst a small number of embryos Bischoff found rather wide variations not corresponding alone to the age. The mean brain-weight of 12 new-born boys was 367 grams, and of 12 girls 396. The difference is here reversed; perhaps on account of the small numbers. The relative weight of the brain to the body is about 1 to 8 at birth; which proportion decreases, of course, with the age. The brain loses again in weight about the sixtieth year of age; perhaps earlier in the female.

The influence of race is discussed, but only very few reliable figures can be quoted. The numbers examined by most observers were too small, and the various factors of influence were insufficiently quoted. Anthropologists have often attempted to estimate the brain-weight by gauging the skull-capacity. Bischoff, however, objects to this method. According to his comparative measurements the error may amount to even 15 per cent., or more. The chances for comparative researches on different races are certainly much more favorable in this country, but we can find the name of no American author in the book but that of Morton.

Hereupon follow two interesting chapters on the relative weight of the separate cerebral portions, and the relation of the weight to the extent of convolutions. No distinct formulations can be abstracted from this discussion. In the next place he compares the brain-weight to the intelligence, admitting as the result of rather limited observations that a parallelism does exist, but is often masked by individual variations and the influence of other factors.

The final chapter is devoted to a general summary, with attempts at explanations. It cannot be said, on the whole, that many wholly new statements are to be found in the work. Its main merit is the discussion of mooted questions upon the basis of more positive and larger material than has hitherto been employed. The book, hence, amounts to a complete summary of our present knowledge upon the subject, rendered more positive by the author's personal researches. While speculative theorizing is avoided on the whole, the work is still quite suggestive on many points. The enjoyment of reading it is badly marred by the often cumbersome style of the author.

H. G.